

**AMENDMENTS TO THE CLAIMS**

1. **(Currently Amended)** A method of improving renal function in a mammal in, or at risk of, chronic renal failure comprising administering to said mammal a therapeutically effective amount of a morphogen, said morphogen comprising an amino acid sequence having
  - (a) at least 70% amino acid sequence homology with the C-terminal seven-cysteine skeleton of human OP-1, or
  - (b) the sequence of the C-terminal seven-cysteine skeleton of human OP-1 being set forth at amino acids 330-431 of SEQ ID NO:1, or
  - (c) at least 60% amino acid identity with the C-terminal seven-cysteine skeleton of human OP-1;wherein said mammal is afflicted with a chronic renal condition:
  - (i) characterized by the progressive loss of renal function associated with the progressive loss of functioning nephron units; and
  - (ii) comprising at least one of the following: chronic diabetic nephropathy, diabetic glomerulopathy, diabetic renal hypertrophy, hypertensive nephrosclerosis, hypertensive glomerulosclerosis, renal dysplasia, glomerular hypertrophy, tubular hypertrophy, glomerulosclerosis and tubulointerstitial sclerosis,wherein said morphogen induces chondrogenesis in an *in vivo* ectopic bone assay, and wherein said therapeutically effective amount causes a clinically significant improvement in a standard marker of renal function in said mammal, so as to thereby improve renal function in the mammal.
2. **(Currently Amended)** A method of delaying the need for, or reducing the frequency of, chronic dialysis treatments in a mammal in, or at risk of, chronic renal failure comprising administering to said mammal a therapeutically effective amount of a morphogen, said morphogen comprising an amino acid sequence having
  - (a) at least 70% amino acid sequence homology with the C-terminal seven-cysteine skeleton of human OP-1, or

- (b) the sequence of the C-terminal seven-cysteine skeleton of human OP-1 being set forth at amino acids 330-431 of SEQ ID NO:1, or
- (c) at least 60% amino acid identity with the C-terminal seven-cysteine skeleton of human OP-1;

wherein said mammal is afflicted with a chronic renal condition:

- (i) characterized by the progressive loss of renal function associated with the progressive loss of functioning nephron units; and
- (ii) comprising at least one of the following: chronic diabetic nephropathy, diabetic glomerulopathy, diabetic renal hypertrophy, hypertensive nephrosclerosis, hypertensive glomerulosclerosis, renal dysplasia, glomerular hypertrophy, tubular hypertrophy, glomerulosclerosis and tubulointerstitial sclerosis,

wherein said morphogen induces chondrogenesis in an *in vivo* ectopic bone assay, and wherein said therapeutically effective amount causes a clinically significant improvement in a standard marker of renal function in said mammal, so as to thereby improve renal function in the mammal.

3. **(Previously Presented)** The method of claim 1, wherein said morphogen comprises a polypeptide comprising at least a C-terminal seven cysteine domain of a protein selected from the group consisting of OP-1, OP-2, OP-3, BMP2, BMP3, BMP4, BMP5, BMP6, BMP8, BMP9, GDF-5, GDF-6, GDF-7, DPP, Vg1, Vgr-1, 60A, GDF-1, GDF-3, GDF-5, GDF-6, GDF-7, BMP10, BMP13, BMP15, UNIVIN, NODAL, SCREW, ADMP, and NEURAL.
4. **(Previously Presented)** The method of claim 3, wherein said morphogen comprises a polypeptide consisting of at least a C-terminal seven cysteine domain of a protein selected from a group consisting of a pro form, a mature form, and a soluble form of human OP-1.
5. **(Canceled)**

6. **(Previously Presented)** The method of claim 1, wherein said morphogen has at least 75% homology with an amino acid sequence of a C-terminal seven-cysteine domain of human OP-1.
7. **(Previously Presented)** The method of claim 1, wherein said morphogen has at least 80% homology with an amino acid sequence of a C-terminal seven-cysteine domain of human OP-1.
8. **(Previously Presented)** The method of claim 1, wherein said morphogen has at least 60% identity with an amino acid sequence of a C-terminal seven-cysteine domain of human OP-1.
9. **(Previously Presented)** The method of claim 1, wherein said morphogen has at least 65% identity with an amino acid sequence of a C-terminal seven-cysteine domain of human OP-1.
10. **(Previously Presented)** The method of claim 1, wherein said morphogen has at least 70% identity with an amino acid sequence of a C-terminal seven-cysteine domain of human OP-1.
11. **(Canceled)**
12. **(Previously Presented)** The method of claim 1, wherein said morphogen is selected from the group consisting of OP-1, OP-2, OP-3, BMP2, BMP3, BMP4, BMP5, BMP6, BMP8, BMP9, GDF-5, GDF-6, GDF-7, DPP, Vgl, Vgr-1, 60A, GDF-1, GDF-3, GDF-5, GDF-6, GDF-7, BMP10, BMP13, BMP15, UNIVIN, NODAL, SCREW, ADMP, and NEURAL.
- 13-14. **(Canceled)**
15. **(Previously Presented)** The method of claim 1, wherein examination of said mammal indicates renal fibrosis.

16. **(Previously Presented)** The method of claim 15, wherein said examination is an ultrasound, MRI or CAT scan of said mammal.
17. **(Previously Presented)** The method of claim 1, wherein said mammal has less than about 50% of the functional nephron units of a mammal having intact healthy kidneys.
- 18-23. **(Canceled)**
24. **(Previously Presented)** The method of claim 1, wherein said mammal has a GFR which is chronically less than about 50% of a GFR<sub>exp</sub> for said mammal.
- 25-27. **(Canceled)**
28. **(Previously Presented)** The method of claim 1, wherein said mammal is a human male weighing at least about 50 kg and has a GFR which is chronically less than about 50 ml/min.
- 29-31. **(Canceled)**
32. **(Previously Presented)** The method of claim 1, wherein said mammal is a human female weighing at least about 40 kg and has a GFR which is chronically less than about 40 ml/min.
- 33-51. **(Canceled)**
52. **(Previously Presented)** The method of claim 1, wherein said renal therapeutic agent is OP-1.
53. **(Previously Presented)** The method of claim 2, wherein said renal therapeutic agent is OP-1.

**54-55. (Canceled)**

56. **(Previously Presented)** The method of claim 1, wherein the morphogen is a dimeric polypeptide.
57. **(Previously Presented)** The method of claim 1, wherein the morphogen is a homodimer or a heterodimer.
58. **(Previously Presented)** The method of claim 2, wherein the morphogen is a dimeric polypeptide.
59. **(Previously Presented)** The method of claim 2, wherein the morphogen is a homodimer or a heterodimer.
60. **(New)** The method of claim 1, wherein the chronic renal condition is chronic diabetic nephropathy.
61. **(New)** The method of claim 1, wherein the chronic renal condition is diabetic glomerulopathy.
62. **(New)** The method of claim 1, wherein the chronic renal condition is diabetic renal hypertrophy.
63. **(New)** The method of claim 1, wherein the chronic renal condition is hypertensive nephrosclerosis.
64. **(New)** The method of claim 1, wherein the chronic renal condition is hypertensive glomerulosclerosis.

65. (New) The method of claim 1, wherein the chronic renal condition is renal dysplasia.
66. (New) The method of claim 1, wherein the chronic renal condition is glomerular hypertrophy.
67. (New) The method of claim 1, wherein the chronic renal condition is tubular hypertrophy.
68. (New) The method of claim 1, wherein the chronic renal condition is glomerulosclerosis.
69. (New) The method of claim 1, wherein the chronic renal condition is tubulointerstitial sclerosis